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What is claimed is:

- 1. A process comprising the steps of: providing a first batch of semiconductor material, and loading the first batch into a carrier for transport into a semiconductor manufacturing process, and while the first batch undergoes the manufacturing process, providing a second batch of semiconductor material, and pausing a second batch process operation until the first batch completes processing, to reduce the idle time of said process.
- 2. A process comprising the steps of: loading a first batch of semiconductor material into a carrier and installing the first batch in a process chamber and while the first batch is in the chamber charging the carrier with a second batch of semiconductor material, and pausing further operation of the second batch, while inspecting the first batch.
- 3. The process according to Claim 2, further comprising the step of: determining if the inspection is satisfactory.
- 4. The process according to Claim 2, further comprising the step of: determining if the inspection is unsatisfactory.
- 5. The process according to Claim 2, further comprising the step of: determining when to resume operation.
- 6. The method according to Claim 2, further comprising the step of: determining when to resume operation, based upon the result of the inspection of the first batch.

- 7. A process comprising the steps of:
- loading a second batch of semiconductor material into a conveyor and installing the second batch in a process chamber before a first batch of semiconductor material has been processed and cooled.
- 8. A process adapted to heat and cool a substrate comprising the steps of:
 forming a first batch of semiconductor material, and loading the first batch into a carrier,
 transferring the first batch to a heating mechanism, forming a second batch of
 semiconductor material, and loading the second batch into the carrier, while heating the
 first batch positioned within the heating mechanism; transferring the first batch between a
 position proximate the heating mechanism and a position proximate the coolable
 member, cooling the first batch positioned proximate within a cooling mechanism; and
 while the first batch completes the process, transferring the second batch to the heating
 mechanism, to reduce the idle time of the process.